

AMENDMENTS TO THE CLAIMS

Without prejudice, this listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Previously Presented) A method for controlling a run of a program executable on at least one microprocessor of a microcontroller, comprising the steps of:
 - reading in information regarding hardware of the microcontroller from at least one information register of the microcontroller; and
 - actuating at least one switch via which the program run is controlled as a function of the information read in;
 - wherein program execution only depends on information in the at least one information register of the microcontroller, which is special for each microcontroller step, without other external or operator related influences.
2. (Original) The method according to claim 1, wherein:
 - the information read in corresponds to at least one of the at least one microprocessor of the microcontroller and at least one additional component of the microcontroller.
3. (Previously Presented) The method according to claim 1, further comprising the step of:
 - controlling a run of a test program that is executable on the at least one microprocessor of the microcontroller of a testing device and is for testing at least one of an additional microcontroller, a control unit including the additional microcontroller, and a control program executable on at least one microprocessor of the additional microcontroller, the controlling being performed as a function of information regarding hardware of the additional microcontroller.
4. (Original) The method according to claim 1, further comprising the step of:
 - controlling a run of a control program that is executable on the at least one microprocessor of the microcontroller of a control unit and is for controlling/regulating technical operations and processes, the controlling being performed as a function of the information regarding the hardware of the microcontroller.

5. (Original) The method according to claim 4, wherein:
the technical operations and processes relate to a motor vehicle.
6. (Previously Presented) A control element for one of a control unit of an internal combustion engine, the control element including a microcontroller, and a testing device for testing at least one of the microcontroller, the control unit including the microcontroller, and a program executable on at least one microprocessor of the a microcontroller, the control element comprising:
a storage medium storing a program sequence that can be executed on a computing element, the program sequence causing the computing element to:
read in information regarding hardware of the microcontroller from at least one information register of the microcontroller, and
actuate at least one switch via which a program run is controlled as a function of the information read in;
wherein program execution only depends on information in the at least one information register of the microcontroller, which is special for each microcontroller step, without other external or operator related influences.
7. (Previously Presented) The control element according to claim 6, wherein:
the computing element includes at least one microprocessor.
8. (Original) The control element according to claim 6, wherein:
the storage medium includes one of a read only memory and a flash memory.
9. (Original) The control element according to claim 6, wherein:
the internal combustion engine is of a motor vehicle.
10. (Previously Presented) A microcontroller, comprising:
at least one microprocessor including a program that is executable on the at least one microprocessor;
at least one information register;
an arrangement for reading in information regarding hardware of the microcontroller from the at least one information register; and

at least one switch actuatable as a function of the information read in and for controlling a run of the program executable on the at least one microprocessor;

wherein program execution only depends on the information in the at least one information register of the microcontroller, which is special for each microcontroller step, without other external or operator related influences.

11. (Original) The microcontroller according to claim 10, wherein:

the information read in corresponds to at least one of the at least one microprocessor of the microcontroller and at least one additional component of the microcontroller.

12. (Original) The microcontroller according to claim 11, wherein:

the information regarding the at least one additional component of the microcontroller includes information about at least one of an internal storage element, an analog/digital (A/D) converter, a digital/analog (D/A) converter, and at least one databus.

13. (Original) The microcontroller according to claim 10, wherein:

the microcontroller is part of a testing device for testing at least one of an additional microcontroller, a control unit, and the program executable on the at least one microprocessor.

14. (Original) The microcontroller according to claim 10, wherein:

the microcontroller is part of a control unit for controlling/regulating technical operations and processes.

15. (Original) The microcontroller according to claim 14, wherein:

the technical operations and processes relate to a motor vehicle.

16. (Previously Presented) The method according to claim 2, wherein:

the information regarding the at least one additional component of the microcontroller includes information about at least one of an internal storage element, an analog/digital (A/D) converter, a digital/analog (D/A) converter, and at least one databus.

17. (Previously Presented) The control element according to claim 6, wherein:

the information read in corresponds to at least one of the at least one microprocessor of the microcontroller and at least one additional component of the microcontroller.

18. (Previously Presented) The control element according to claim 17, wherein:
the information regarding the at least one additional component of the microcontroller includes information about at least one of an internal storage element, an analog/digital (A/D) converter, a digital/analog (D/A) converter, and at least one databus.
19. (Previously Presented) The method according to claim 1, wherein:
the program run is controlled by one of activating and deactivating at least one of command sequences for specific features of the microcontroller and workarounds.
20. (Previously Presented) The method according to claim 1, wherein:
the information read in corresponds to at least one of a manufacture, model, type and size of components of the microcontroller.
21. (Previously Presented) The control element according to claim 6, wherein:
the information read in corresponds to at least one of a manufacture, model, type and size of components of the microcontroller.
22. (Previously Presented) The microcontroller according to claim 10, wherein:
the information read in corresponds to at least one of a manufacture, model, type and size of components of the microcontroller.
23. (Previously Presented) The method according to claim 1, wherein the information is read in from a read-only information register.
24. (Previously Presented) The control element according to claim 6, wherein the information is read in from a read-only information register.
25. (Previously Presented) The microcontroller according to claim 10, wherein the information is read in from a read-only information register.

26. (Previously Presented) The method according to claim 1, wherein the program run occurs without external intervention for operating or displaying as to a program time sequence.

27. (Previously Presented) The control element according to claim 6, wherein the program run occurs without external intervention for operating or displaying as to a program time sequence.

28. (Previously Presented) The microcontroller according to claim 10, wherein the run of the program occurs without external intervention for operating or displaying as to a program time sequence.

29. (Previously Presented) The method according to claim 1, wherein there is only one control program for different hardware configurations.

30. (Previously Presented) The control element according to claim 6, wherein there is only one control program for different hardware configurations.

31. (Previously Presented) The microcontroller according to claim 10, wherein there is only one control program for different hardware configurations.

32. (Previously Presented) A method for controlling a run of a program executable on at least one microprocessor of a microcontroller, comprising:

reading in information regarding hardware of the microcontroller from at least one information register of the microcontroller; and

actuating at least one switch via which the program run is controlled as a function of the information read in;

wherein the program is executable using at least two different microcontroller steps, and that in the at least one information register of the microcontroller, the information directly relates to hardware of a special microcontroller step and that, depending on this information, execution of the program is switchable so that only

program parts are executed which are necessary for the special microcontroller step, so that the execution of the program is directly related to the special microcontroller step.